PREPARATION

Before starting the installation, read these fitting instructions through, then follow the sequence from Page 1 through to the evacuation and charging.

Points to check

A. Check and note any damage to vehicle interior or exterior.

B. Check and note operation of all accessories, horn, lights, etc.

C. Check operation of engine cooling system.

D. Inspect the kit for damaged parts before starting the installation.

Installation Precautions

A. This system has been designed to suit standard wiring by the vehicle manufacturer, the wiring on non-approved accessories could result in malfunction of the unit or damage to the vehicle.

B. Disconnect the negative lead from the battery.

C. Route all refrigerant hoses, tubes and wiring harnesses to avoid fouling.

D. To prevent entry of moisture or foreign material into the system do not remove shipping plates or plugs until immediately before installation of components.

E. Use refrigerant oil to lubricate all hose and tube fittings.

F. Use two spanners when tightening fittings.

G. Use torques specified.

NOTE: On completion of the installation you are advised to apply the "Ozone Depleting Substance" and "Filter Drier Replacement" labels to a clearly visible location in the engine bay in accordance with Codes of Practice for air conditioning. (Some states may differ.)

TORQUE CHART - Hose & Tube Fittings (O'Ring)

Size	Tube O.D.	Thread-UNF	Torque-N.M.
No. 5	5/16	9/16-18	13-15.0
No. 6	3/8	5/8-18	11,0-16,0
No. 8	1/2	3/4-16	18,0-23,0
No. 10	5/8	7/8-14	24,0-30,0
No. 12	3/4	1-1/6-12	30,0-38,0

THE AIR CONDITIONING SYSTEM INSTALLED IN THIS VEHICLE USES AN
OZONE DEPLETING
REFRIGERANT
CFC-12 (R12)
AND MAY ONLY BE SERVICED OR DECOMMISSIONED BY AN ACCREDITED PERSON

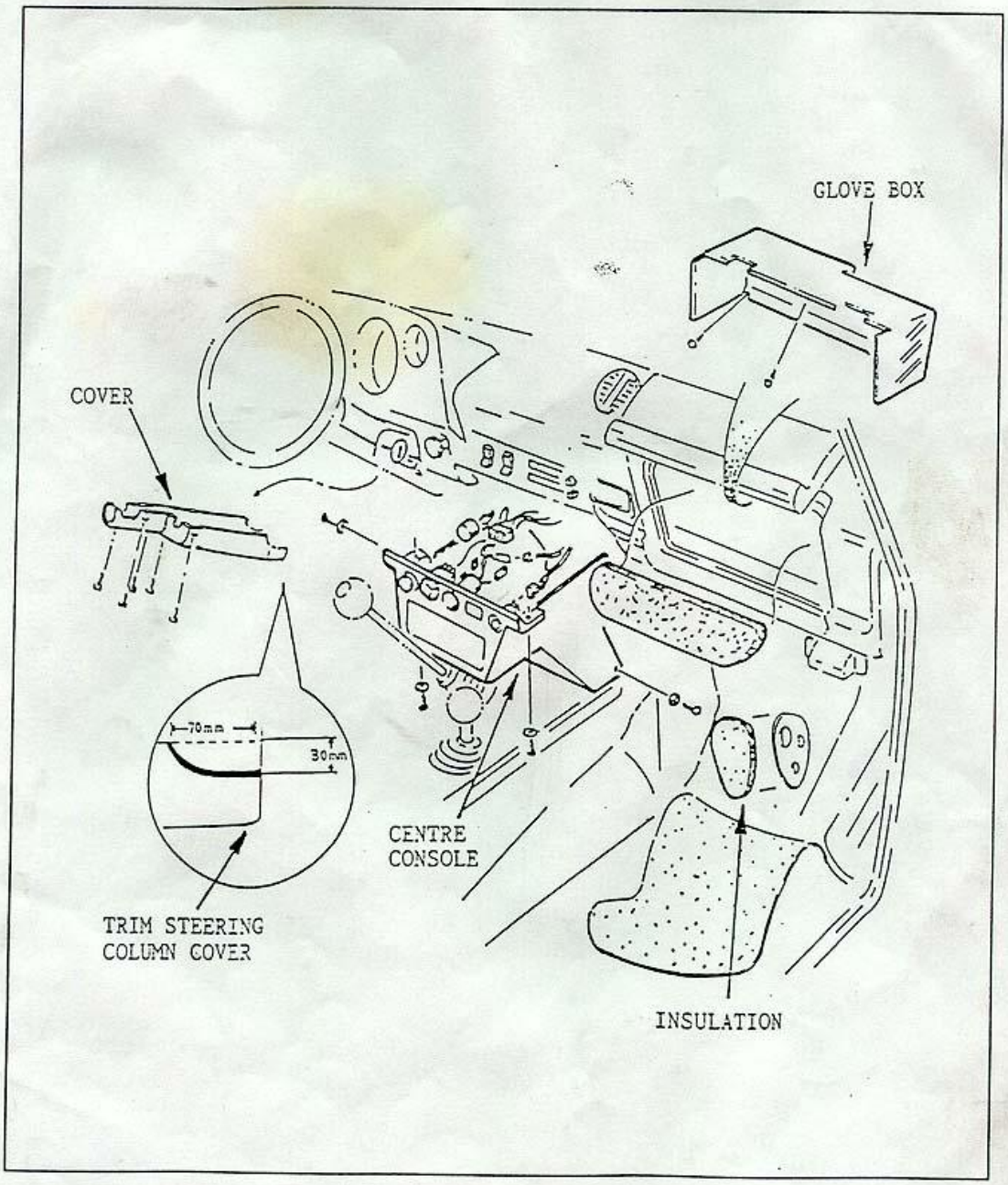
1. PARTS TO BE REMOVED

A. Steering column cover (five screws). Trim column as shown.

B. Remove centre console (four self tappers and various electrical connectors).

C. Glove box (three self tappers. Force glove box to the R/H/S and manoeuvre out).

D. Using template supplied drill the two holes for evaporator tubes. Cut floor insulation as shown.

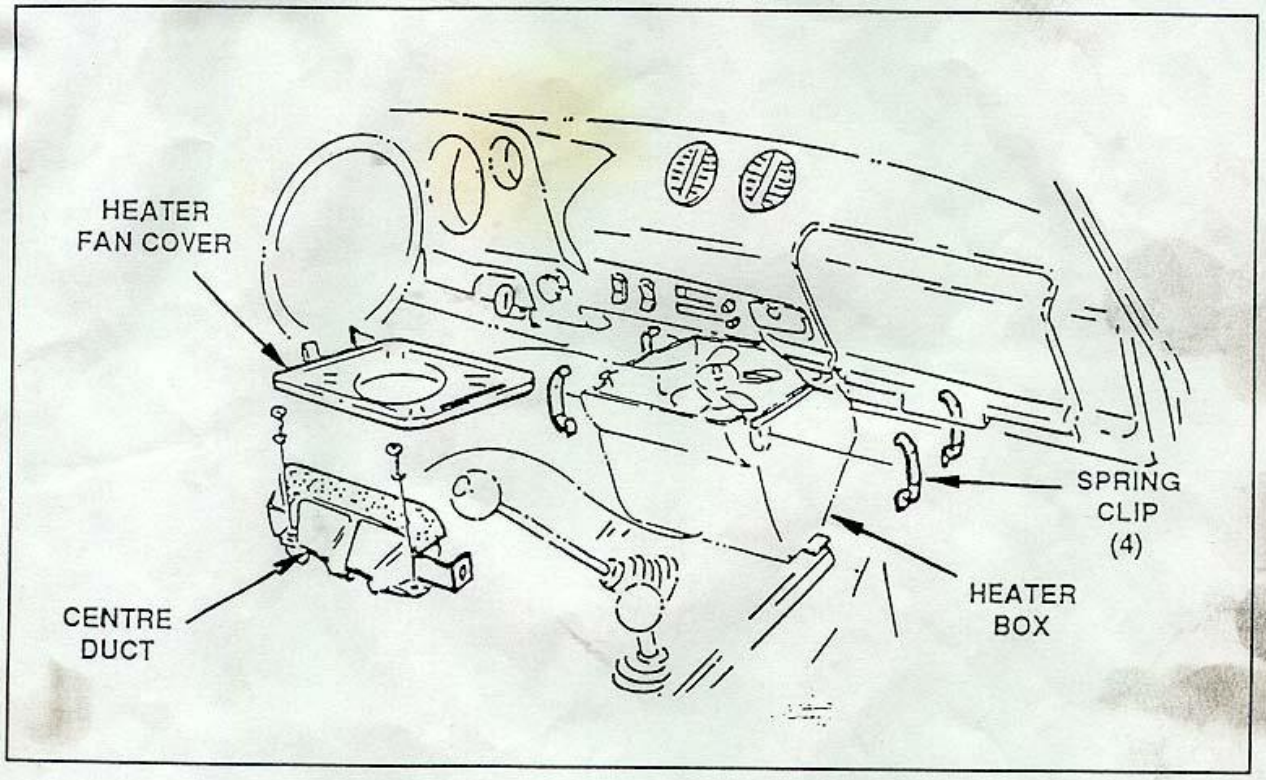


1. PARTS TO BE REMOVED (Cont....)

F. Centre duct (two self tappers).

G. Heater box (four spring clips) then lower and rest on transmission tunnel.

H. Heater fan cover.



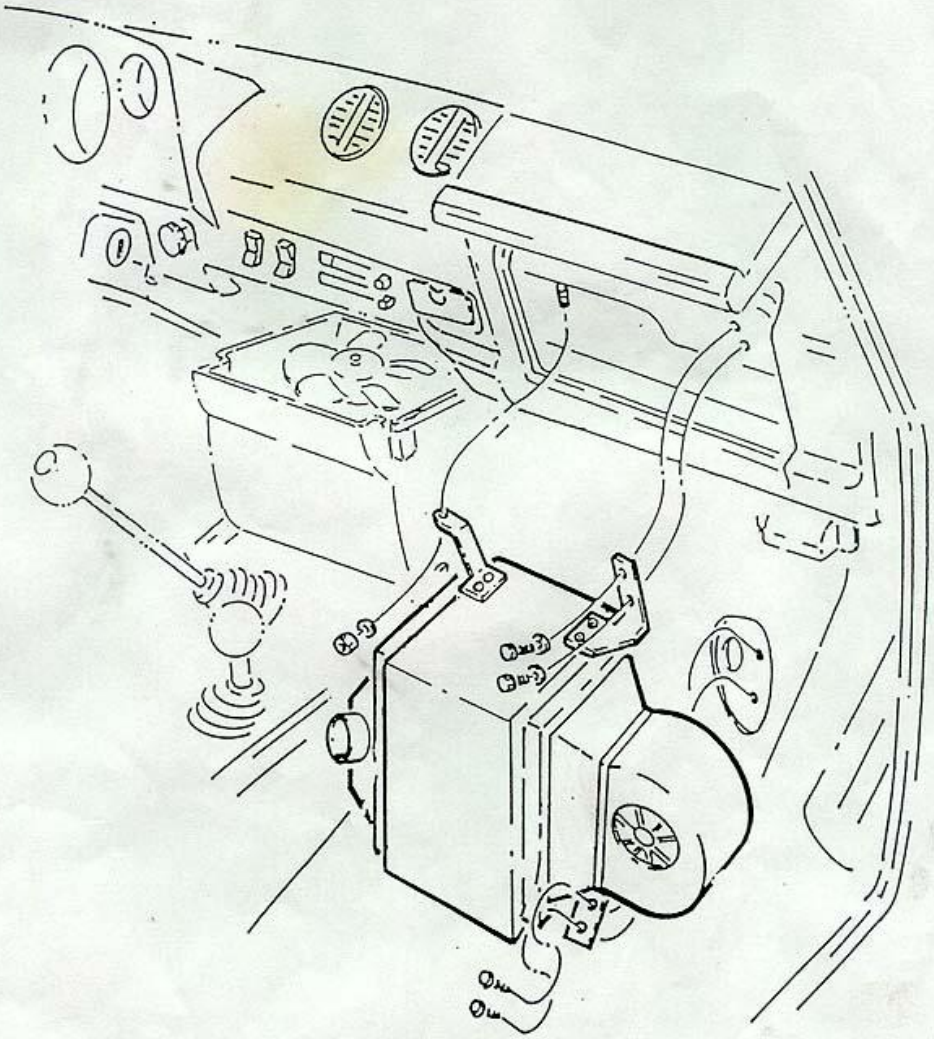
2. EVAPORATOR

A. From engine side unclip double fusible link at firewall and cable tie to wiring loom to keep from rattling.

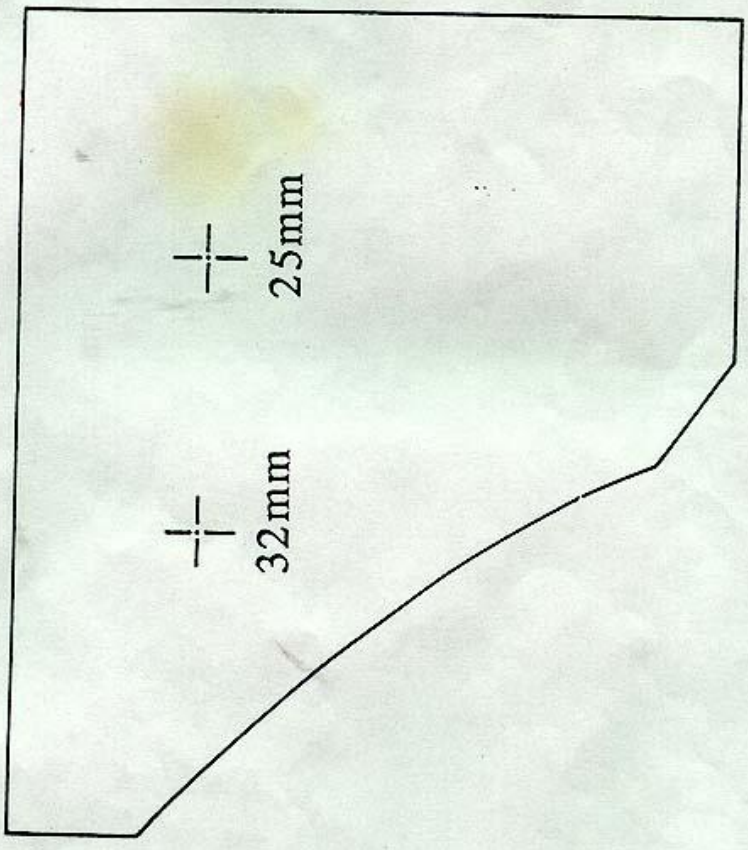
B. Drill existing holes to 6mm diameter to install evaporator assembly.

NOTE: If holes do not exist, use evaporator as template to drill holes.

C. Locate evaporator assembly into position shown and secure using 6mm bolts, washers and nuts.



EVAPORATOR PIPE TEMPLATE



3. WIRING AND INTERIOR

A. Install the (3) relays to mounting bracket and secure bracket to rear of evaporator lower case. Connect A/C harness to relays.

B. Connect blower motor harness.

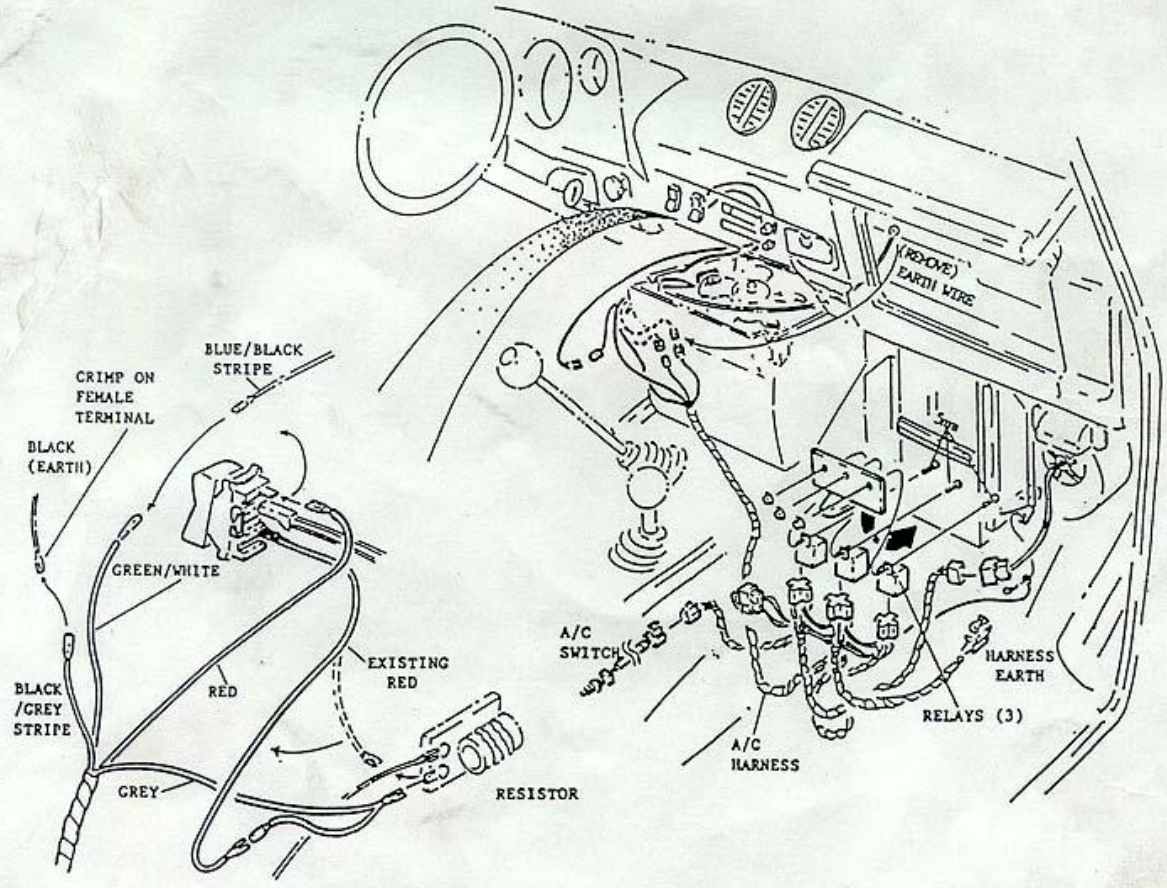
C. Connect A/C switch harness.

D. Disconnect the lower existing red wire from resistor. Connect the grey wire of A/C harness and patch wire to existing red wire removed from resistor. Remove the existing blue with black stripe wire from fan switch and connect red wire of A/C harness to switch. Reconnect blue with black stripe wire to green/white stripe wire of A/C harness.

E. Remove black earth wire from position shown. Cut eye terminal off and crimp female spade terminal supplied to earth wire and connect to black with grey stripe wire of A/C harness.

F. Use electrical tape on terminals.

G. Locate earth wire of A/C harness to position shown.



4. EVAPORATOR

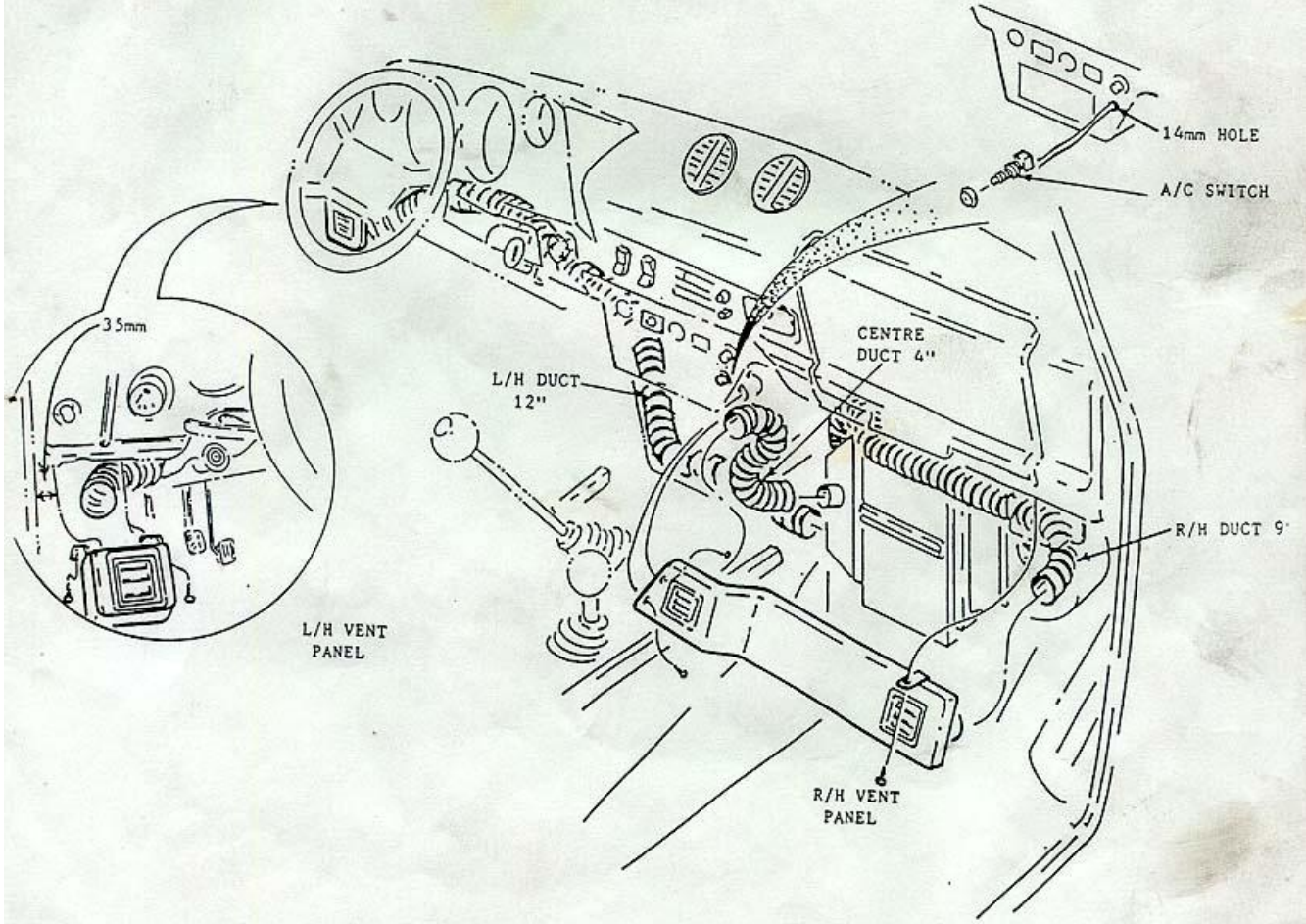
A. Install flex ducts as shown and secure using plastic cable ties.

B. Attach vent panels as shown, drill the necessary holes and secure using self tappers supplied.

C. Reinstall interior parts.

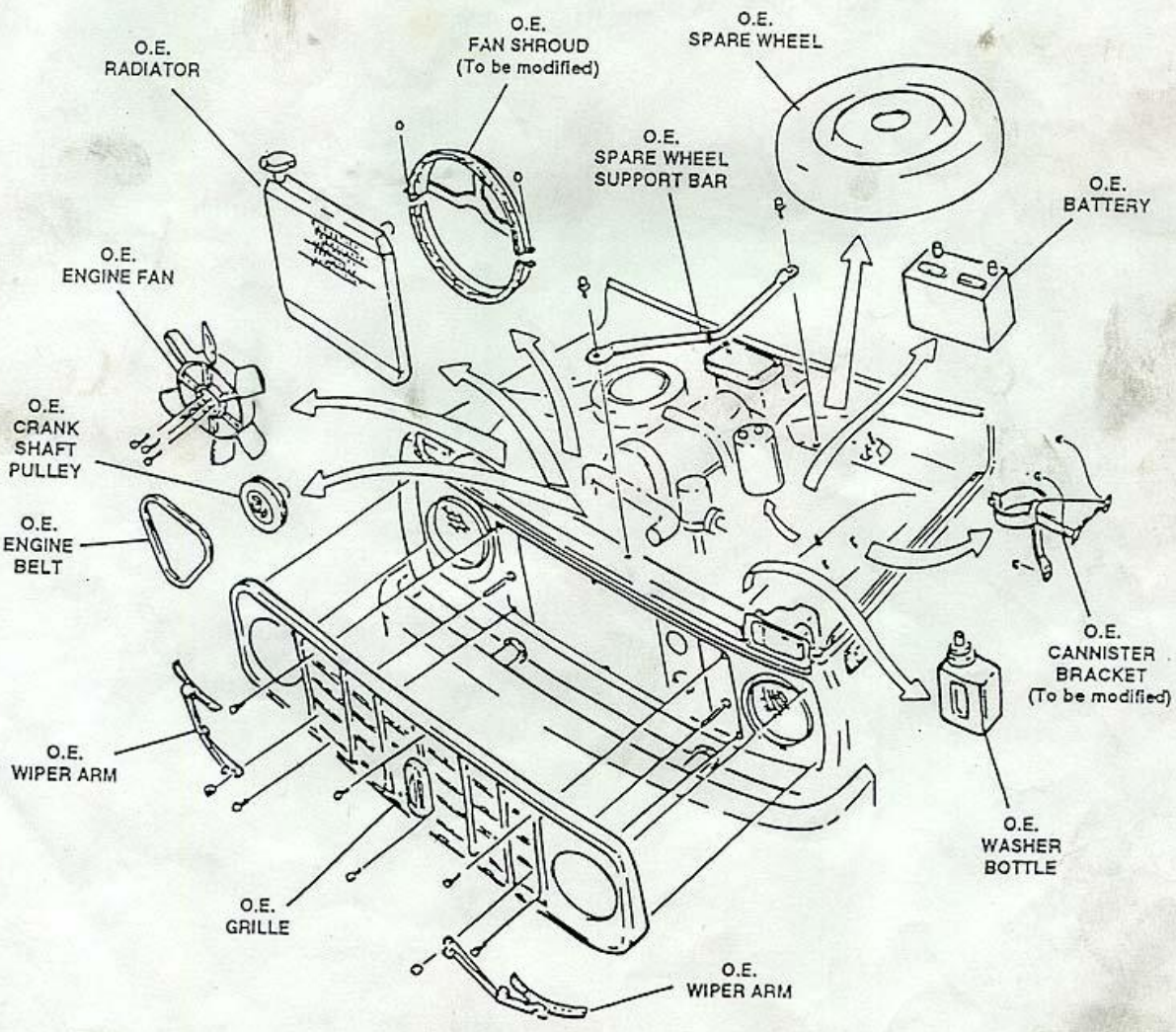
D. Drill 14mm hole in right side of console panel (as indicated).

E. Insert A/C switch through hole and secure using nut provided, connect to A/C wiring harness.



5. PARTS TO BE REMOVED FROM ENGINE COMPARTMENT

A. Spare wheel and support bar.
B. Battery and clamp.
C. Washer bottle.
D. Headlight wipe arms (two nuts).
E. Grille (6 screws)
F. Radiator
G. Fan shroud (to be modified).
H. Engine fan and belt.
I. Crank shaft pulley.
J. Canister bracket (to be modified).
K. Bonnet support bracket (to be modified).



6. FAN SHROUD, BONNET SUPPORT BRACKET AND CHARCOAL CANISTER BRACKET MODIFICATION

A. Modify top fan shroud holes as shown.

B. Trim top fan shroud bracket as shown for clearance of air conditioning drive belt.

C. Modify bottom fan shroud rubber as shown.

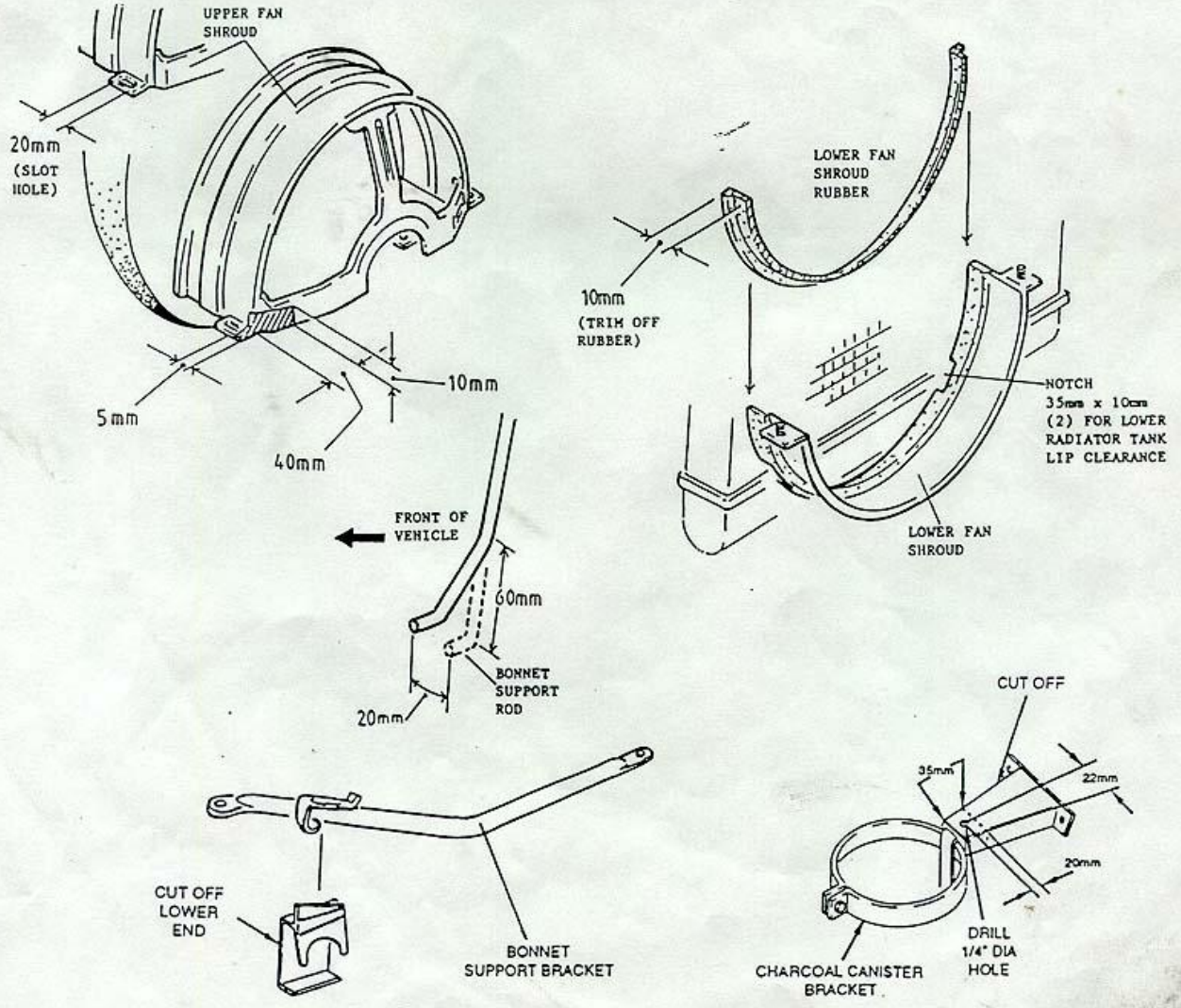
D. Notch back-end of bottom fan shroud as shown for clearance of bottom radiator tank rim.

E. Modify bonnet support bracket as shown.

F. Modify charcoal canister bracket as shown for relocation.

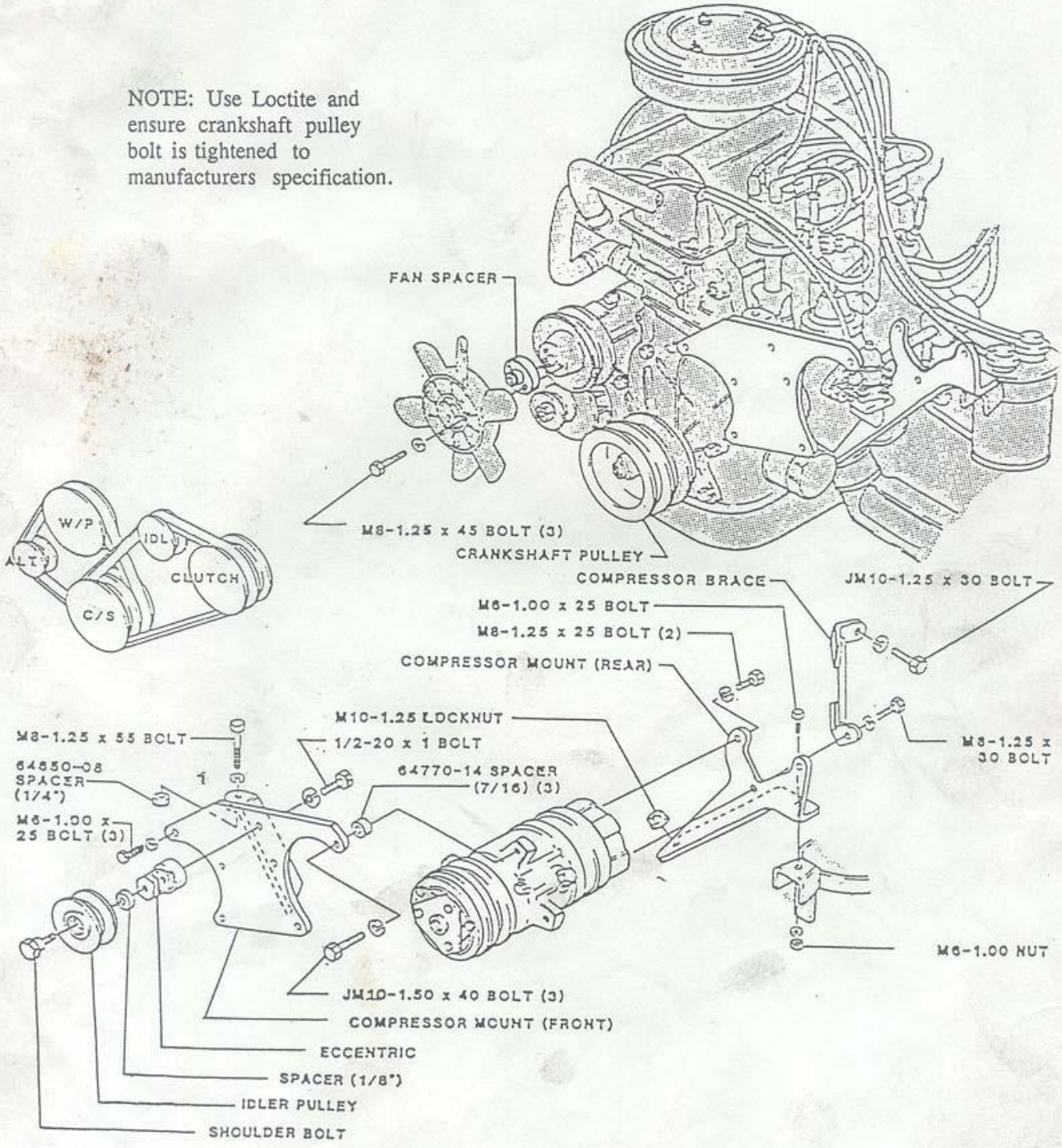
G. Drill 1/4" diameter hole on charcoal canister bracket as shown.

H. Modify bonnet support rod to allow clearance for compressor clutch.



7. MOUNT AND DRIVE INSTALLATION

NOTE: Use Loctite and ensure crankshaft pulley bolt is tightened to manufacturers specification.



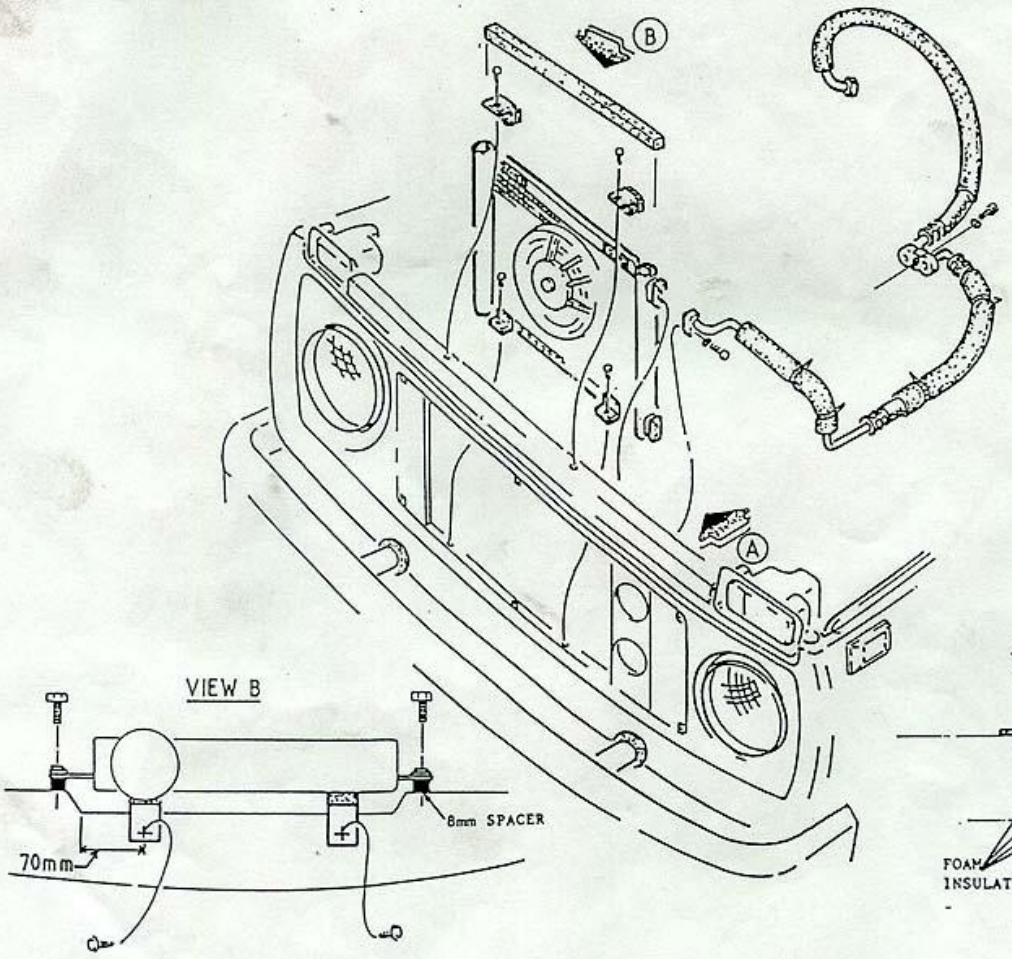
8. CONDENSER INSTALLATION

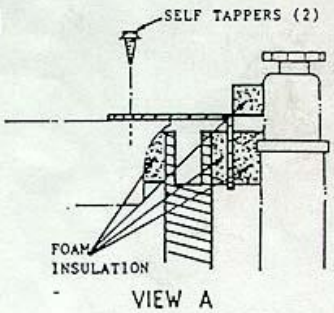
A. Install discharge hose to condenser as shown using (1) M8 x 20mm bolt and washer (lubricate O'Ring).

B. Insert condenser from engine side into position as shown. Drill the necessary holes into the radiator support panel using the condenser bracket as a template (see diagram inset).

C. Secure lower condenser brackets using (2) self tappers.

D. Secure upper condenser brackets using (2) self tappers.





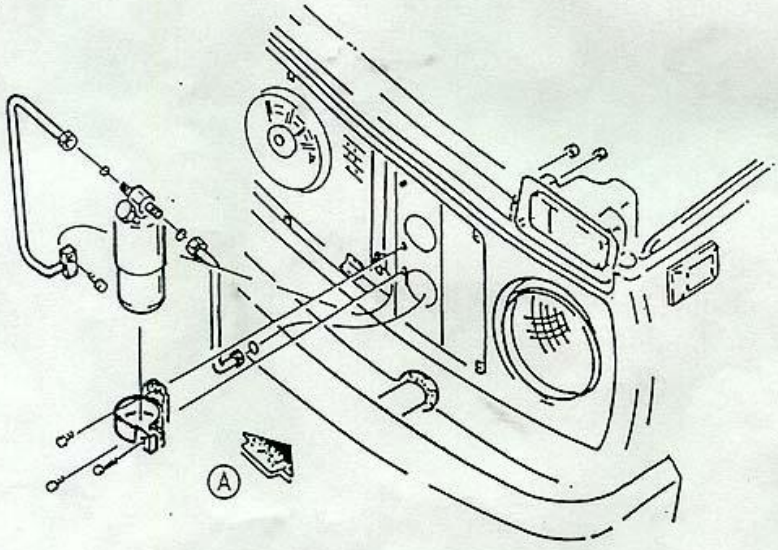
9. FDR, HOSES AND TUBES INSTALLATION

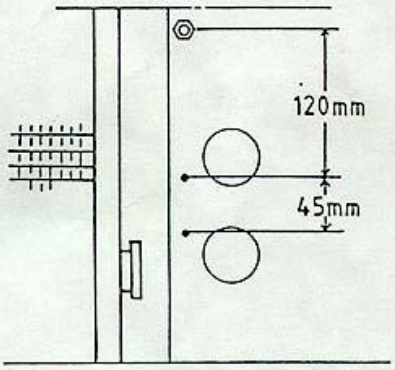
A. Fit FDR mounting as shown using OE top radiator mount bolt and measurement provided, drill (2) holes (6mm). Assemble FDR to clamping bracket and affix to radiator support panel using (2) M6 x 16 bolts and (2) M6 nuts.

B. Install liquid tubes to FDR inlet and outlet in the position shown.

C. Attach liquid hose/tube assembly to short liquid tube and secure to passenger side fender well using (2) hose clamps (lubricate O'Rings).

NOTE :	Lubricate all O'Rings





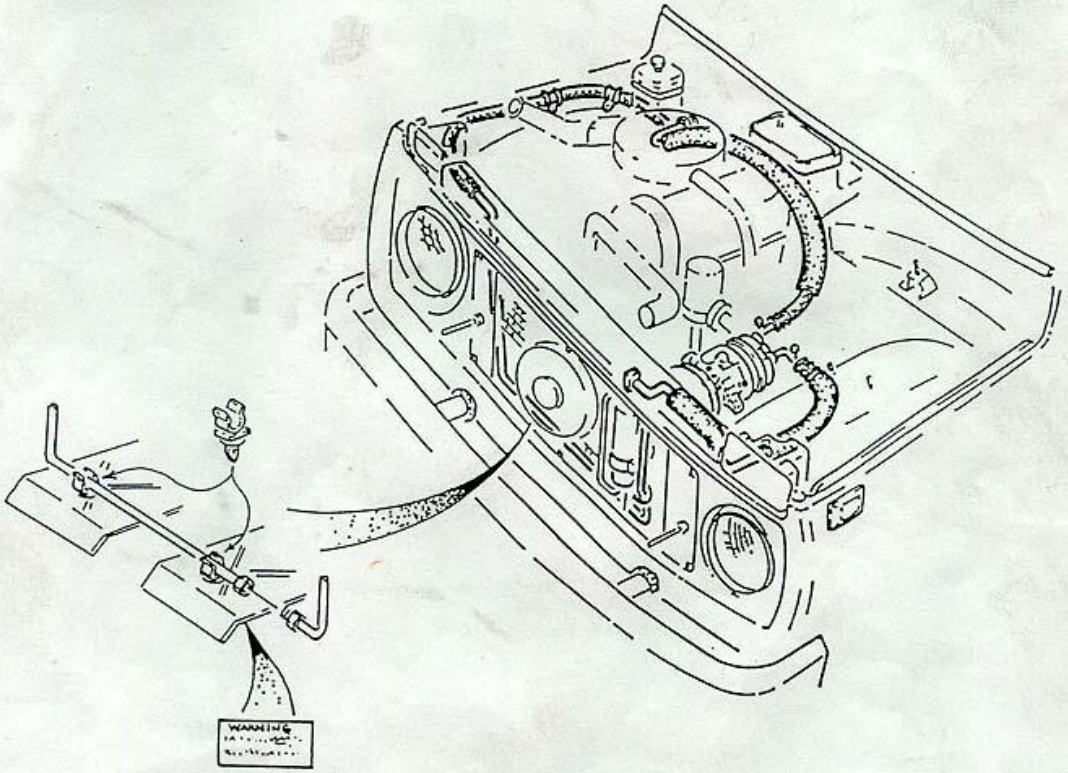
VIEW A

10. HOSES AND TUBES INSTALLATION

A. Secure liquid tube to OE splash panels as shown using (2) plastic tube clips. Drill (2) 8mm holes and locate clips.

B. Attach suction and discharge freon hose assembly to rear of compressor using (1) M10 x 35mm bolt and spring washer then route suction hose to evaporator (lubricate O'Rings).

NOTE :	Lubricate all O'Rings



WARNING STICKER FOR LIQUID TUBE
ATTACH : ON UNDERSIDE OF ENGINE SPLASH TRAY

11. ENGINE COMPARTMENT WIRE HARNESS INSTALLATION

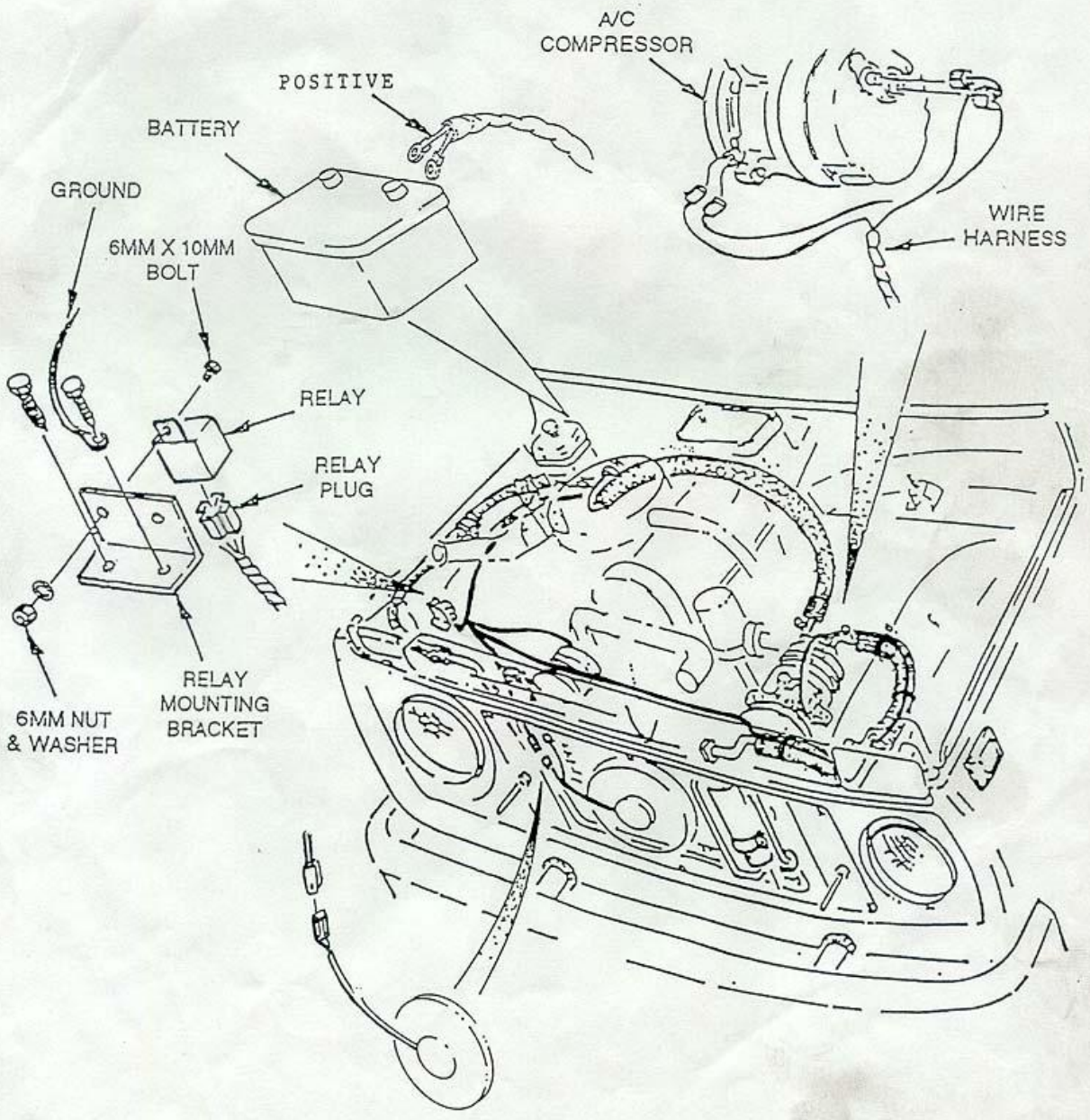
A. Secure relay mounting bracket and ground black wire/blue wire to OE passenger side fender well behind headlight as shown using (2) self tappers.

B. Secure clear relay and earth terminal to firewall as shown using (1) self tapper, attach relay plug.

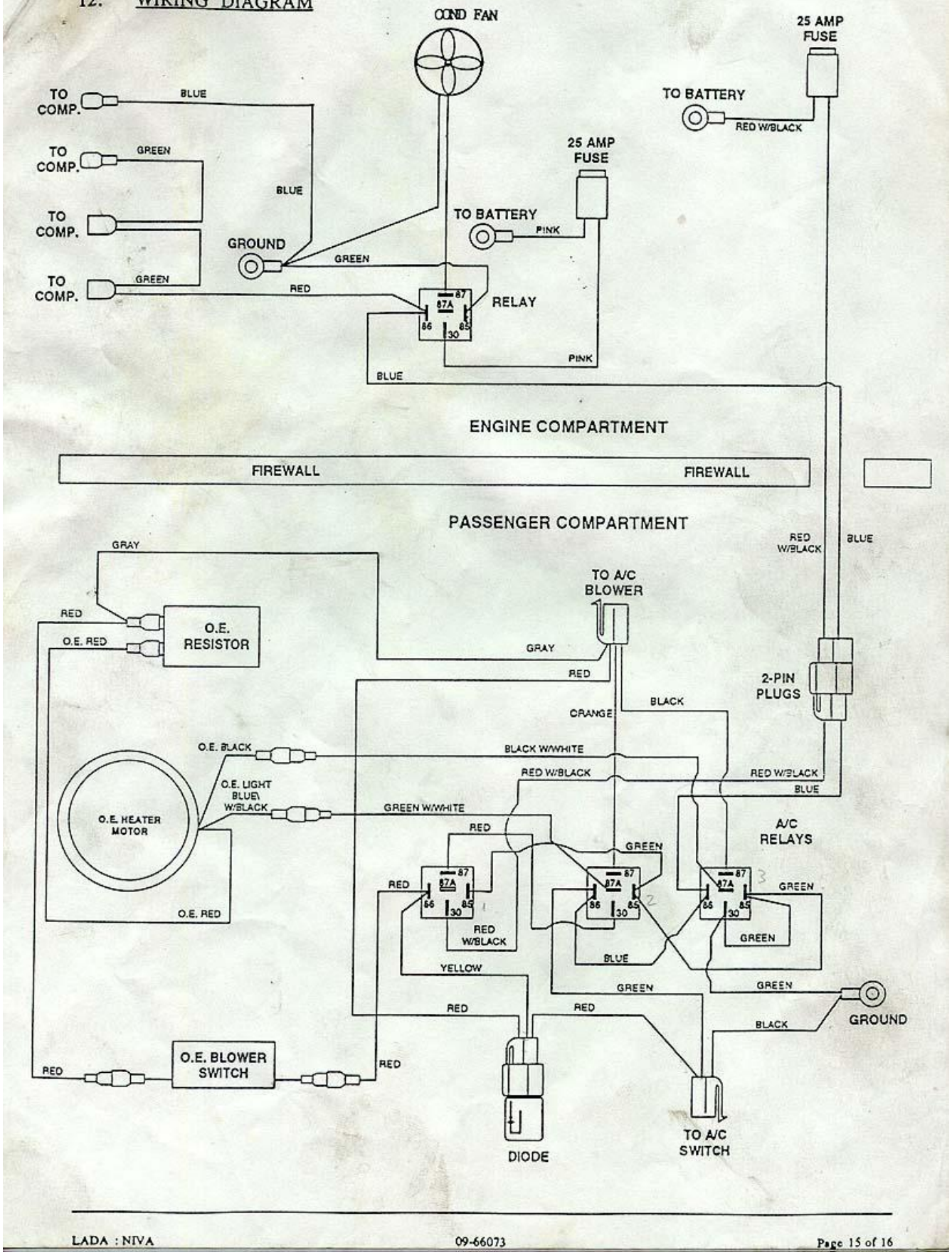
C. Secure positive wires to positive battery terminal as shown (see wiring diagram).

D. Attach harness wire plugs to A/C compressor as shown (see wiring diagram).

E. Connect condenser fan plug to A/C harness.



12. WIRING DIAGRAM



EVACUATION AND CHARGING PROCEDURE

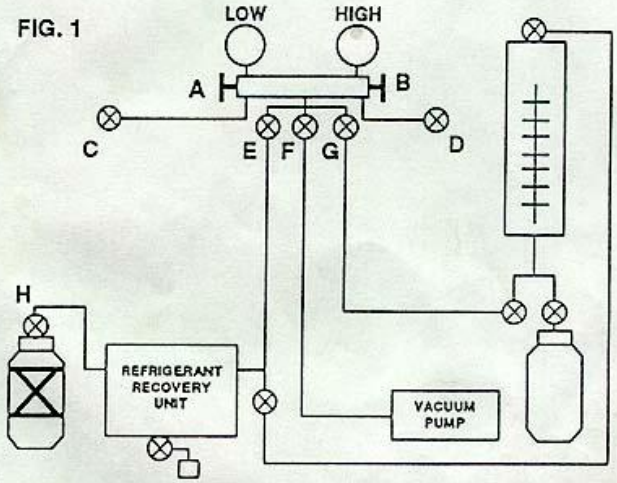
NOTE: 1. GLOVES AND SAFETY GLASSES MUST BE WORN.
2. WORK IN A WELL VENTILATED AREA.
3. DO NOT SMOKE NEAR REFRIGERANT.

WARINING: REFRIGERANT 12 IS AN OZONE DEPLETING SUBSTANCE - EMISSIONS OF REFRIGERANT MUST BE KEPT TO A MINIMUM.

AT CHARGING STATION FIT STOP TAPS OR VALVES TO MINIMIZE REMOVING HOSES AND RELEASING REFRIGERANT, ALSO FIT STOP TAPS OR VALVES TO THE HIGH AND LOW SIDE FILLING HOSES C & D MAXIMUM DISTANCE 300 mm FROM END.

SPECIFIED CHARGE 800 +/- 50 GRAMS

FIG. 1



NOTE: ⊗ INDICATS STOP TAP OR VALVE - FIT THESE WHEREVER A HOSE HAS TO BE REMOVED.

STEP 1 EVACUATION

START VACUUM PUMP, OPEN VALVE F, OPEN VALVES A & C LOW PRESSURE FILLING HOSE.

HIGH SIDE GAUGE READS BELOW ZERO

HIGH SIDE GAUGE NOT BELOW ZERO

BLOCKAGE OR LEAK EVIDENT IN SYSTEM. FIND CAUSE AND RECTIFY.

LEAVE VALVES A,C & F OPEN, SLOWLY OPEN HIGH SIDE VALVES B & D.

EVACUATE SYSTEM TO 6 KPA (29-30 INHG) ABSOLUTE. CLOSE VALVES A,B, & F. SYSTEM MUST MAINTAIN 6 KPA (29-30 INHG) FOR A MINIMUM OF 15 MINS.

LOW PRESSURE GAUGE NEEDLE RISES

LOW PRESSURE GAUGE NEEDLE STEADY

CONTINUE EVACUATION FOR 15 MINS.

RECOVER REFRIGERANT FROM SYSTEM OPEN VALVES A, B, C, D, E, & H, AFTER THE RECOVERY PROCEDURE CLOSE VALVE E, OPEN VALVE F AND CONTINUE THE EVACUATION PROCEDURE FOR A MINIMUM OF 15 MINS THEN CLOSE VALVES A, B, & F. TURN PUMP OFF. REFER FIG. 1.

PARTIALLY CHARGE SYSTEM WITH 200 GRAMS OF REFRIGERANT.

STEP 2 LEAK TESTING

PARTIALLY CHARGE SYSTEM WITH 200 GRAMS OF REFRIGERANT THROUGH HIGH SIDE FILLING HOSE.

LOCATE LEAKAGE USING AN ELECTRONIC LEAK DETECTOR. CHECK ON THE UNDERSIDE OF ALL FITTINGS AND COMPONENTS AS R12 IS HEAVIER THAN AIR.

RECOVER REFRIGERANT FROM SYSTEM OPEN VALVES A, B, C, D, E, & H REFER FIG. 1.

REPAIR LEAK SOURCE.

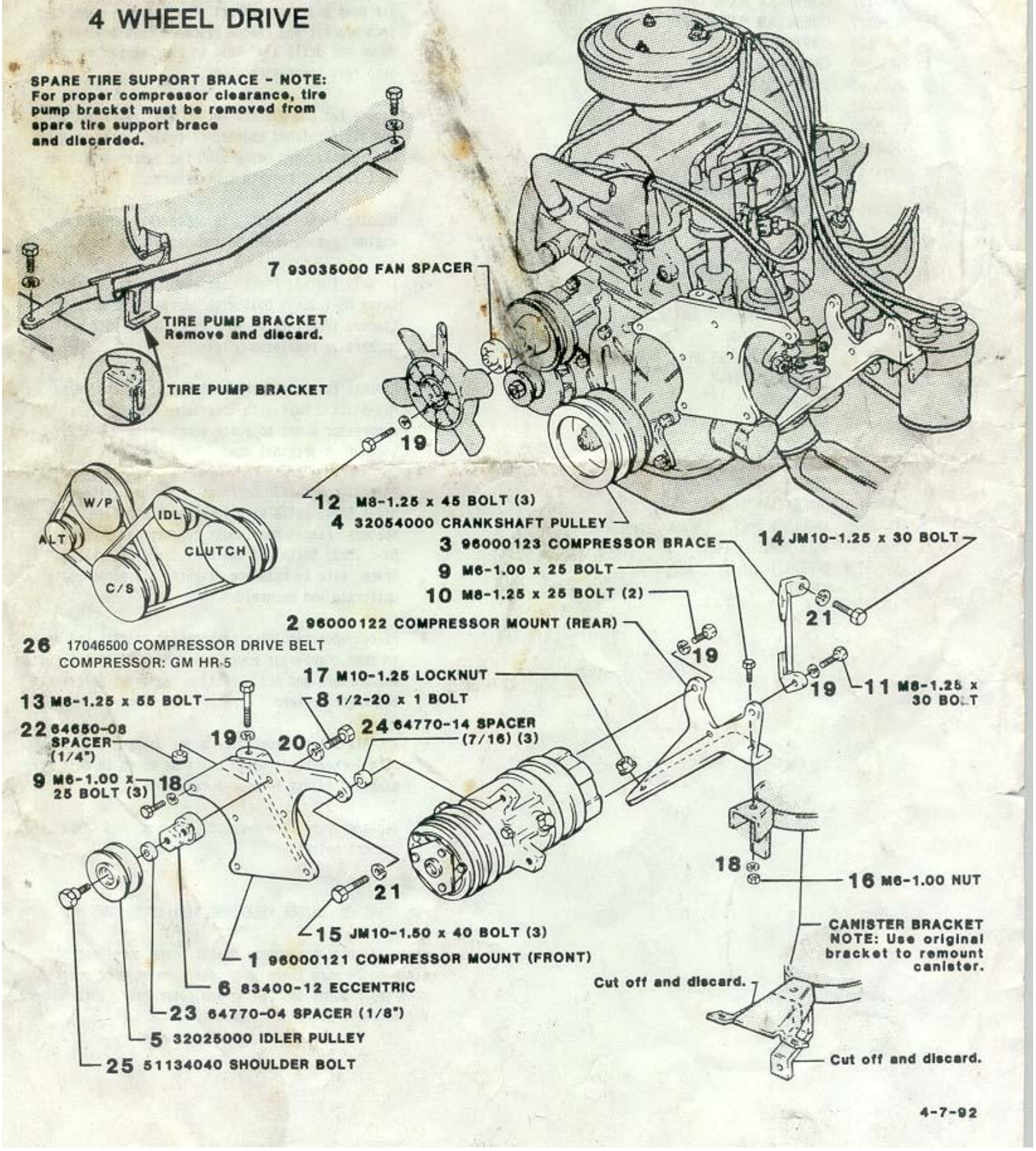
CONTINUE WITH EVACUATION AND CHARGING PROCEDURE AS PER STEPS 1 - 3.

NOTE: ATTACH OZONE DEPLETING SUBSTANCE "ODS" LABEL IN A CLEARLY VISIBLE LOCATION IN ENGINE COMPARTMENT.

45002670F

1991-1992 LADA NIVA "4"

1.6 LITER
STANDARD STEERING
WITHOUT AIR PUMP
4 WHEEL DRIVE



4-7-92

	PART NO.	DESCRIPTION	QTY
1	96000121	COMPRESSOR MOUNT (FRT)	1
2	96000122	COMPRESSOR MOUNT (RR)	1
3	96000123	COMPRESSOR BRACE	1
4	32054000	CRANKSHAFT PULLEY	1
5	32025000	IDLER PULLEY	1
6	83400-12	ECCENTRIC (3/4")	1
7	93035000	FAN SPACER (5/8")	1
	92246000	BOLT KIT	1
8		BOLT,1/2-20X1,HH	1
9		BOLT,M6-1.00X25,HH	4
10		BOLT,M8-1.25X25,HH	2
11		BOLT,M8-1.25X30,HH	1
12		BOLT,M8-1.25X45,HH	3
13		BOLT,M8-1.25X55,HH	1
14		BOLT,JM10-1.25X30,HH	1
15		BOLT,JM10-1.50X40,HH	3
16		NUT,M6-1.00,HH	1
17		LOCKNUT,M10-1.25,HH	1
18		LOCKWASHER 1/4"	4
19		LOCKWASHER 5/16"	7
20		LOCKWASHER 1/2"	1
21		LOCKWASHER M10	4
22	64650-08	SPACER (.750X.343X.250)	1
23	64770-04	SPACER (.875X.468X.125)	1
24	64770-14	SPACER (.875X.468X.437)	3
25	51134040	SHOULDER BOLT	1
26	17046500	BELT (DAYCO 17470)	1
27	45002670F	SCHEMATIC	1
28	21000000	KIT BOX	1

INSTALLATION INSTRUCTIONS 45002670F

1. Disconnect battery. Remove and retain spare tire, air pump and tire support. Remove vapor cannister from bracket and remove bracket. Trim bracket as shown and drill 1/4" hole in bracket for mounting onto rear compressor mount.

2. Remove fan and discard shroud and crankshaft pulley. Install furnished crankshaft pulley using original nut. Install fan using 5/8" fan spacer and three M8-1.25x45 bolts with lockwashers.

3. Holding mount assembly in approximate position to engine, remove bolts as indicated by schematic.

4. Loosely install front compressor mount to engine using M8-1.25x55 bolt with lockwasher and 1/4" spacer. Insert three M6-1.00x25 bolts with lockwashers in remaining holes.

5. Loosely fasten compressor brace to engine using M10-1.25x30 bolt with lockwasher. Fasten rear compressor mount to motor mount using M10-1.25 locknut on original stud.

6. Install compressor to front mount using three M10-1.50x40 bolts with lockwasher and 7/16" spacers. Fasten rear mount to compressor using M8-1.25x25 bolts and one M8-1.25x30 bolt thru brace, with lockwashers. Tighten all above bolts uniformly and securely.

7. Place vapor cannister in modified bracket and mount to rear compressor mount using M6-1.00x25 bolt with lockwashers and nut. Position cannister in bracket and tighten clamp.

8. Install idler assembly to mount using 1/2-20x1 bolt with lockwasher. Thread belts as shown in belt wrap diagram. Adjust to proper tension.

9. Replace spare tire support, air pump and spare tire. Connect battery.

CAUTION: BEFORE RELEASING VEHICLE TO CUSTOMER

Check all radiator hoses, heater hoses, fuel and oil lines to be sure there is proper clearance of compressor, compressor mount and braces and compressor clutch. Check for proper compressor alignment.